

**WHAT IS CLAIMED IS:**

1. A method of inspecting an OLED device to locate and characterize defects in the registration of organic material(s) transferred from a donor in swaths in response to heat produced by a multichannel laser print head, comprising:

- a) optically inspecting the OLED device after or during manufacture to identify the boundaries between swaths of transferred organic material(s); and
- b) determining if the swaths overlap at a seam of the boundary or if there is a gap between swath edges at the seam or if there is an offset between the edges of adjacent swaths (need to put in).

2. A method of inspecting an OLED device to determine if organic material(s) transferred from a donor in swaths in response to heat produced by a multichannel laser print head have been produced to minimize visual artifacts produced by the OLED device, comprising:

- a) optically inspecting the OLED device after or during a manufacturing process to identify the boundaries between swaths of transferred organic material(s);
- b) determining if the swaths overlap at a seam of the boundary or determining if there is a gap between swath edges at the seam or if there is an offset between the edges of adjacent swaths; and
- c) determining if the overlap, gap or offset are sufficient to require correction in the manufacturing process.

3. The method of claim 2 further including correcting the manufacturing process either after the production of the OLED device or during OLED device production in response to the determination if the overlap, gap or offset were sufficient to require manufacturing process correction.

4. A method of manufacturing an OLED device comprising:
  - a) operating a multichannel laser print head in response to an image file to cause the transfer of organic material(s) thermally transferred from a donor in swaths to the OLED device, comprising:
    - b) optically inspecting the OLED device after or during a manufacturing process to identify the boundaries between swaths of transferred organic material(s);
    - c) determining if the swaths overlap at a seam of the boundary or determining if there is a gap between swath edges at the seam or if there is an offset between the edges of adjacent swaths; and
    - d) correcting the image file if the overlap, gap or offset are sufficient to require correction in the manufacturing process.
5. The method of claim 4 further including producing the image file by using a CAD file and equipment characterization data.
6. The method of claim 5 wherein the act of correcting the image artifact includes changing the machine instruction file.
7. The method of claim 4 further including determining the distribution of visual artifacts across the OLED device.
8. The method of claim 7 further including using the distribution of visual artifacts to identify problems in manufacturing equipment.